



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

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November 21, 2014

Robert Delhome
Charter Environmental, Inc.
560 Harrison Avenue
Boston, MA 02118

RE: CHELMSFORD—Solid Waste Management/COR
Glenview Landfill
Stedman Street
FMF Number: 296976
BWP SW25/Corrective Action Design
Transmittal Number: X260852

Final Decision – Approval

Dear Mr. Delhome:

The Massachusetts Department of Environmental Protection, Northeast Regional Office, Bureau of Waste Prevention, Solid Waste Management Section (“MassDEP”) has reviewed your application for the Corrective Action Design (the “CAD”), at the Glenview Landfill located off Stedman Street in Chelmsford, Massachusetts (referred to herein as the “Landfill” or the “Site”). Sandbanks, LLC of Wilmington, Massachusetts (“Sandbanks”) owns the Landfill.

Langdon Environmental, LLC of Marlborough, Massachusetts (“Langdon”) prepared and submitted the application, category *BWP SW 25: Corrective Action Design*, Transmittal No X260852 to MassDEP on behalf of Charter Environmental, Inc. of Boston, Massachusetts (“Charter”). MassDEP received the application on May 16, 2014.

Please include the application Transmittal Number X260852 and the Landfill’s FMF Number 296976 on all future correspondence regarding this application and decision.

DISCUSSION

Background

On March 21, 2014, Sandbanks, as the owner of the Landfill, entered into an Administrative Consent Order, File No. ACO-NE-14-4001 (the "Sandbanks ACO") with MassDEP for the closure and the post closure monitoring and maintenance of the Landfill including, but not limited to addressing the impact of cyanide contamination on the groundwater at the Site. Charter is under agreement with the owner, Sandbanks to complete the final closure of the Landfill and other associated activities in accordance with the Solid Waste Management Regulations, 310 CMR 19.000. As owner of the Landfill, Sandbanks retains ultimate responsibility for the closure and post closure monitoring and maintenance of the Landfill.

On March 21, 2014, Charter entered into an Administrative Consent Order, File No. ACO-NE-14-4002 (the "Charter ACO") with the MassDEP to close the Landfill. The Charter ACO incorporated the Conceptual Closure Plan approved by the MassDEP on November 20, 2013, as Exhibit 1.

The Conceptual Closure Plan, as approved by the MassDEP, authorizes Charter to receive and place at the Landfill 420,000 cubic yards (cy) of additional grading and shaping materials to complete and finance the final closure of the Landfill in accordance with the Massachusetts Solid Waste Regulations, 310 CMR 19.000.¹ Approved grading and shaping materials include: clean soil; soil meeting MassDEP's guidance "Reuse and Disposal of Contaminated Soils at Massachusetts Landfills", COMM-97-001, for unlined landfills; street sweepings; catch basin cleanings from storm water systems that are separated from sewers; and dewatered dredge materials for unlined landfills per MassDEP Policy COMM-94-007².

In addition, the Conceptual Closure Plan, as approved by the MassDEP, established a maximum final elevation of 212 feet for the Landfill. This is approximately 48 feet higher than the Landfill's current elevation of 164 feet and approximately 8 feet lower than the maximum elevation of the abutting City of Lowell Landfill.

The Conceptual Closure Plan also authorized Charter to receive and stockpile approximately fifty thousand (50,000) cubic yards (cy) of shaping and grading soil pending Charter's submittal and MassDEP's review and approval of the CAD for completing closure of the Landfill. MassDEP's approval of the Conceptual Closure Plan required that Charter submit to MassDEP for review and approval a plan for the proposed interim stockpile of grading and shaping material at the Landfill.

On October 16, 2013, MassDEP issued, pursuant to 310 CMR 19.037(4)(a), a provisional decision on the Conceptual Closure Plan (the "October 2013 Provisional Decision") seeking

¹ Application category, BWP SW45 - *Any Facility – Alternative Review*, Transmittal No. X257263

² Interim Policy for Sampling, Analysis, Handling and Tracking Requirements for Dredged Sediment Reused or Disposed at Massachusetts Permitted Landfills, February 15, 1995.

comment by interested parties including, but not limited to, the public, the Town of Chelmsford, and Charter on the proposed approval of the Conceptual Closure Plan. The MassDEP met with representatives of the Town, Charter and Sandbanks on November 1, 2013, to discuss the project including the Conceptual Closure Plan.

MassDEP accepted comments on the October 2013 Provisional Decision until November 12, 2013. No public comments were received and on November 20, 2013, the MassDEP issued the final decision approving the Conceptual Closure Plan. Pursuant to 310 CMR 19.033(5), the appeal period on the final decision expired on December 20, 2013.

On January 21, 2014, the MassDEP received Charter's application for approval of the Interim Stockpile Plan ("ISP") for the stockpiling of approximately 50,000 cubic yards ("cy") of grading and shaping materials and up to 10,000 cy of asphalt, brick and concrete ("ABC")³ at the Landfill. In addition, the ISP identified that the 100 year Flood Plain Boundary for Black Brook has been incorrectly identified in the 2010 Federal Flood Insurance Map (F.I.R.M.). The 2010 F.I.R.M., I.D. No. 25017C0251E, in part, relocated the floodplain boundary from its previous location shown on the 1980 F.I.R.M to a portion of the Landfill plateau and eastern side.

CDM Smith of Cambridge, Massachusetts submitted a Letter of Map Revision ("LOMR") application, I.D. No. R290635003734, to the Federal Emergency Management Agency ("FEMA") requesting a correction of the 100 year Flood Plain Boundary for Black Brook in the area of the Landfill shown on the 2010 Federal Flood Insurance Map.

FEMA approved this revision in a letter to the Chelmsford Board of Selectmen dated October 7, 2014.

On March 11, 2014, the MassDEP issued a provisional decision, pursuant to 310 CMR 19.033(4)(a)⁴, (the "ISP Provisional Decision") seeking comment on the proposed decision from interested parties including, but not limited to, the Town of Chelmsford, the public, and Charter. The comment period ended on April 4, 2014. The MassDEP received several comments pertaining to traffic and the height of landfill.

On April 25, 2014, the MassDEP issued a final decision approving the ISP; thereby allowing Charter to bring and stockpile the proposed materials at the Landfill pending submittal and approval of the final CAD for the Landfill. The decision included a response to the comments received by the MassDEP on the ISP Provisional Decision. Pursuant to 310 CMR 19.033(5), the appeal period on the April 25, 2014 decision expired on May 26, 2014.

Charter established and maintains a Financial Assurance Mechanism ("FAM") in accordance with 310 CMR 19.051, in the amount of Two Million Nine Hundred Eighty-two Thousand Dollars (\$2,982,000) to assure completion of all its obligations under the Charter ACO. Charter established and funded the required FAM on April 7, 2014.

³ The ABC material will be used for the construction of temporary roadways and vehicle turning areas on the Landfill footprint.

⁴ On February 14, 2014, revisions to 310 CMR 19.000 became effective that included, but were not limited to, replacement of the provisions of 310 CMR 19.037(4) with 310 CMR 19.033(4).

Current Application:

The current application for approval of a final Corrective Action Design contains the detailed design plans and specifications to construct the final closure of the Landfill. Pursuant to the Conceptual Closure Plan, as previously approved by the MassDEP on November 20, 2014, the CAD includes the receipt and placement of 420,000 cy of shaping and grading material to finance and complete the closure and maintains the final elevation of the closed Landfill at 212 feet, approximately 48 feet higher than the current elevation. In addition, as described in the CAD Charter proposes to:

1. Install a final landfill cap on all areas where new grading and shaping materials are placed. The cap will consist of a 6-inch bedding layer, 40-mil thick textured high density polyethylene liner, 12-inch thick coarse sand drainage layer and 8-inch thick topsoil layer. The bedding layer may be coarse sand, select grading and shaping material or screened street sweepings.
2. Augment a portion of the previously constructed landfill cap to meet the requirements of MassDEP solid waste regulations. Charter will perform a detailed investigation to determine which portions, if any, of the existing landfill cap can be reused.
3. Limit the extent of the capped Landfill to the limits of the previously approved abandoned landfill cap constructed by the prior operator of the site. The edge of the landfill cap correlates to the extent of grading and shaping materials historically placed at the Site.
4. Not install a landfill venting or gas collection system at the Landfill consistent with the previously approved Corrective Action Design. Such a system is not necessary due to the absence of landfill gas at the Site.
5. Access to the Site for trucks delivering grading and shaping material will be Route 3 to Drum Hill Road to Westford Street to the existing Site driveway. Exiting traffic will use the same route in the reverse direction to leave the Site. Charter also states in the CAD that this traffic route will not change without approval of the Chelmsford Board of Selectmen.

Additional discussion of the application can be found in the Fact Sheet included as Attachment 1 to this decision.

MassDEP performed an initial review of the CAD permit application and in a letter dated June 25, 2014, requested additional information from Charter to supplement the CAD application. On behalf of Charter in letters dated July 10, 22 and 30, 2014 and August 26, 2014, Langdon provided satisfactory responses to the request for additional information.

On July 31, 2014, the MassDEP issued a provisional decision, pursuant to 310 CMR 19.033(4)(a)⁵, (the "CAD Provisional Decision" seeking comment on the proposed decision from interested persons including, but not limited to, the Town of Chelmsford, the public, and Charter. The comment period was originally set to close on August 25, 2014 at 5:00

⁵ On February 14, 2014, revisions to 310 CMR 19.000 became effective that included, but were not limited to, replacement of the provisions of 310 CMR 19.037(4) with 310 CMR 19.033(4).

pm, but was twice extended by MassDEP, first to September 4, 2014 and then to September 12, 2014.

MassDEP received several sets of written comments during the public comment period including a letter from the Town of Chelmsford Board of Selectmen dated September 10, 2014. A copy of MassDEP's Responses to the Comments (the "RTC") is included as an attachment (Attachment 2) to this decision. The MassDEP considered all the comments that were submitted. The conditions of this approval have been amended where appropriate in response to the comments received by MassDEP.

DECISION

MassDEP has determined that the application as conditioned by this decision, complies with the applicable requirements of 310 CMR 19.000 including, but not limited to, the requirements of 310 CMR 19.112 and 310 CMR 19.151, subject to the Applicant's compliance with the conditions of this decision. These conditions are imposed by MassDEP pursuant to 310 CMR 19.043(1) and 310 CMR 19.151(3) (a).

Therefore, in accordance with M.G.L Chapter 111, s.150 A and 310 CMR 19.000, MassDEP approves your application and the Corrective Action Design for the Glenview Landfill subject to compliance with the conditions of this decision and authorizes Charter to construct.

CONDITIONS

1. **Effective Date:** This decision is effective upon the date stamped on page one of this decision unless the effective date is extended by MassDEP or a court of competent jurisdiction pursuant to 310 CMR 19.033(5).
2. **Site Preparation:** Prior to the initiation of placement of grading and shaping materials outside of the previously approved Stockpile Area, Charter shall install the erosion control barriers a shown on CAD Plans, Sheet C-2 Site Preparation and Cap Repair Plan.
3. **Truck Access to Site:** As described in the CAD, access to the Site for trucks delivering grading and shaping material shall be Route 3 to Drum Hill Road to Westford Street to the existing Site driveway. Exiting traffic shall use the same route in the reverse direction to leave the Site. Trucks shall not enter or exit the Site from Stedman Street. Charter shall maintain at the Site documentation that all truck drivers have been instructed in the requirements of this paragraph. No alteration to the truck access route as described in the CAD and required by this paragraph shall occur without the consent of the Town of Chelmsford Board of Selectmen.

Charter shall also, as recommended by its' traffic consultant Green International, maintain existing site related signs that highlight the access drive for the truck drivers entering and exiting the Site; and shall on or before December 12, 2014, install a sign along the westbound approach of Westford Street, preceding the driveway to the Site, warning drivers of "TRUCKS ENTERING".

4. **Acceptable Grading & Shaping Materials:** The following grading and shaping materials are approved for use in this project: clean soils; soils meeting the guidelines established in MassDEP's policy COMM-97-001: *"Reuse and Disposal of Contaminated Soils at Massachusetts Landfills,"*⁶ for unlined landfills; street sweepings; catch basin cleanings from storm water systems that are separated from sewers; and dewatered dredge materials for unlined landfills per MassDEP Policy COMM-94-007.⁷

5. **Material Tracking:** The transportation of all grading and shaping materials to the Site shall be conducted in accordance with the Material Shipping Record (MSR) procedures described in either the COMM-97-001 or COMM-94-007 policies; or the Bill of Lading (BOL) provisions of 310 CMR 40.0030, as applicable.

6. **Confirmatory Sampling:** In addition to the laboratory testing to be performed by the source sites prior to delivery to the Landfill, the following two sets of confirmatory sampling and laboratory analysis shall be performed during acceptance of grading and shaping materials:

- a. If a load(s) enters the Landfill that is either visually different than other loads from the same source site; exhibits a strong odor or free liquids, or has a significant amount of solid waste, Charter shall segregate that load (and any subsequent loads with similar issues from the same source site) from the stockpile operations and collect a sample for laboratory analysis. This procedure shall apply to all grading and shaping materials that are accepted at the Landfill.
- b. Charter shall arrange for the Engineer of Record⁸ for the project to collect and submit for laboratory analysis random samples of incoming grading and shaping material from randomly selected loads being delivered at the Landfill. The random samples shall be collected at a frequency of three (3) samples per calendar quarter (that is per three months). The load that a random sample is collected from shall be segregated from the ongoing operations until the results from the laboratory analysis are available.⁹

7. **Site Maintenance:** Maintenance of side slopes, berm(s), drainage swales, storm water systems, outlet structures, and appurtenances shall be performed to keep these structures in good working order. The area around the Site entrance shall be maintained in a condition which shall prevent tracking of sediment onto the public right-of-way. All

⁶ For contaminants for which acceptance criteria are not identified in COMM-97-001 or COMM-94-007 Charter may use the RCS-2 notification criteria identified in 310 CMR 40.0000 as the acceptance criteria.

⁷ Charter may seek approval from MassDEP to utilize additional materials or previously approved BUD materials for shaping and grading of the Landfill. BUD materials are materials approved pursuant to 310 CMR 19.060, *"Beneficial Use of Solid Waste"*, for reuse as shaping and grading material in construction of the subgrade for a landfill cap.

⁸ Engineer of Record or his/her direct employee or subordinate.

⁹ As provided by the Charter ACO the results of these activities will be recorded in the Daily Log and the Engineer of Records Monthly Construction Reports to the MassDEP with copies to the Boards of Health of the Town of Chelmsford and City of Lowell.

sediment spilled, dropped, washed or tracked onto the public right-of-way shall be removed without delay.

8. **Dust Control:** Charter shall also implement all measures necessary to control and prevent the generation and emission of dust wherever and whenever necessary at the Landfill, the access road, and any other areas related to or under control of Charter to prevent fugitive dust emissions and/or the occurrence of nuisance conditions. Water shall not be used for dust control in amounts that produce excessive infiltration, ponding, runoff or erosion.

9. **Compliance:** The Department reserves the right, in accordance with 310 CMR 19.000, to amend, modify, suspend or revoke this approval as necessary to protect the public health, safety or the environment, or as otherwise necessary to insure compliance with law and/or regulation, as amended.

10. **Permit Modification:** No changes, modifications or alterations shall be made to the approved plans, unless otherwise approved, in writing, by the Department in accordance with 310 CMR 19.000.

11. **Standard Conditions:** Charter shall comply with the requirements established at 310 CMR 19.000 including, but not limited to, the provisions established at 310 CMR 19.043(5), "*Standard Conditions*" of the Massachusetts Solid Waste Regulations.

12. **Existing Landfill Cap Augmentation:** Charter shall perform a detailed investigation of the portion of the existing landfill cap that Charter proposes to augment to comply with MassDEP Solid Waste Regulations. This information shall be submitted to MassDEP on or before January 15, 2015 as an application category BWP SW 45 "Alternative Review Process for Certain Modifications of a Solid Waste Management Facility" pursuant to 310 CMR 4.00 "*Timely Action Schedule and Fee Provisions*" and subject to the requirements of Paragraph 16. Submittals, below. If MassDEP determines that the proposed modification to the Corrective Action Design constitutes a significant change to the approved design then MassDEP may, at its sole discretion, require that the proposed changes be submitted as a category BWP SW11, "Major Modification of a Landfill" or a category BWP SW22, "Minor Modification of a Landfill" application.

13. **Instruction of Contractors and Employees:** The Permittee shall instruct all contractors and employees in the requirements of this decision and permit, as applicable to their work; and Charter Permittee shall maintain and make available at the Property a copy of this permit and all approved plans, appendices, protocols and attachments for use by Charter's contractors and employees. Charter shall maintain records at the Site documenting that all contractors and employees have been instructed pursuant to this paragraph.

14. **Closure Certification:** As required by the Consent Order no later than ninety (90) days after the date of completion of the construction of the landfill cap, the Charter shall submit to the MassDEP, an "as built" plan, prepared by a Massachusetts Registered Professional Engineer. The "as built" plan shall include a report, prepared by the Massachusetts Registered Professional Engineer of record, providing all applicable quality control/ quality assurance data and certifying that the closure was completed in conformance

with the approved plans and 310 CMR 19.000, including any modifications to those plans as may have been approved. "As built" plans shall include, but not be limited to, all existing underground utilities, retained or abandoned. The Closure Certification shall be submitted as a category SW 43 Determination of Landfill Closure Completion application pursuant to the requirements of paragraph 16. Submittals, below.

15. **"Minimum" or "Maximum" Design Specifications:** Wherein the design specifications provide a standard as "minimum" or "maximum" the closure certification shall document that all material accepted and placed for that use equals or exceeds the standard. Averaging for purposes of demonstrating compliance with a minimum or maximum standard is not acceptable. Where materials are received that do not meet any standard the closure completion certification report shall clearly document either that the material was rejected and not used, or was modified or otherwise processed, so as to meet the standard as actually used. Wherein an area must be reworked, repaired or otherwise removed and replaced, confirmatory testing shall be completed and documented showing that the reworked, repaired and/or replaced materials meet specifications. The thickness of the soil layers shall include documentation by direct tabulated measurement that the layer meets the specifications. Testing results and measurements shall not be averaged to determine compliance with the specifications.

16. **Submittals:** The submittals to MassDEP required by this decision shall be submitted by Charter in accordance with the applicable fee provisions of 310 CMR 4.00 *"Timely Action Schedule and Fee Provisions"*. In the event that the MassDEP provides written comments to Charter on documents submitted pursuant to this paragraph, Charter shall provide a response and revised document to the MassDEP within twenty-one (21) days of the date of the MassDEP's written comments that corrects any deficiencies reasonably identified by the MassDEP in the document(s)¹⁰ and; makes any changes that the MassDEP reasonably requires.

17. **Compliance with Other Regulations:** This decision does not relieve Charter of its obligation to comply with all applicable state, federal and local laws and regulations.

18. **Project Schedule:** For information purposes Charter shall submit to the MassDEP on or before December 12, 2014, a detailed project schedule that tracks material placement, closure construction, permit submittals and Charter ACO related deadlines. The schedule shall be updated monthly and included with the monthly inspection report.

19. **Liability:** The Permit is issued subject to the conditions of joint and several liability in accordance with 310 CMR 19.043(3).

20. **Post Closure Use:** Pursuant to 310 CMR 19.143(1) (a) any change in the post closure use on the landfill from the passive¹¹ use approved by this decision, will require submittal of an application to MassDEP for review and approval. The applicant shall contemporaneously provide copies of the application to the Town of Chelmsford's Town Manager, Board of Selectmen, and Board of Health and to the City of Lowell's Board of Health, City Manager, and

¹⁰ Such documents include but are not limited to Notice of Administrative or Technical Deficiency issued pursuant to 310 CMR 4.00.

¹¹ The CAD does not provide for an active use or utilization of the Landfill after the completion of the closure other than the maintenance of the cap (vegetative cover).

City Council. In addition, as provided by 310 CMR 19.033(4)(a) Provisional Decision MassDEP will provide an opportunity for comment by the applicant, the public, the Town of Chelmsford, the City of Lowell, and other interested parties on the application prior to MassDEP issuing a final decision.

21. **Extension of Timelines:** Charter may request and MassDEP may, at its sole discretion, approve an extension of any timeline pursuant to this decision.

NOTICE OF RIGHT TO APPEAL

Appeal. Any person aggrieved by the issuance of this decision, except as provided for under 310 CMR 19.033(4)(b), may file an appeal for judicial review of said decision in accordance with the provisions of M.G.L. c. 111, s. 150A, and M.G.L. c. 30A, not later than thirty (30) days following the date of issuance of the final decision. The standing of a person to file an appeal and the procedures for filing such appeal shall be governed by the provisions of M.G.L. c. 30A. Unless the person requesting an appeal requests and is granted a stay of the terms and conditions of the decision by a court of competent jurisdiction, the decision shall remain effective.

Notice of Action. Any aggrieved person intending to appeal this decision to the Superior Court shall first provide notice to the Department of their intention to commence such action. Said notice of intention shall include the Department file number and shall identify with particularity the issues and reasons why it is believed the decision was not proper. Such notice shall be provided to the Office of General Counsel of the Department and the Regional Director for the regional office which processed the application. The appropriate addresses to which to send such notices are:

General Counsel
Department of Environmental Protection
One Winter Street - 3rd Floor
Boston, MA 02108

Eric Worrall
Regional Director
Department of Environmental Protection
205b Lowell Street
Wilmington, MA 01887

No allegation shall be made in any judicial appeal of this decision unless the matter complained of was raised at the appropriate point in the administrative review procedures established in those regulations, provided that a matter may be raised upon a showing that it is material and that it was not reasonably possible with due diligence to have been raised during such procedures or that matter sought to be raised is of critical importance to the environmental impact of the permitted activity.

If you have any questions in regards to this matter please contact Richard Spieler at (978)694-3317.

This final document copy is being provided to you electronically by the
Department of Environmental Protection. A signed copy of this document
is on file at the DEP office listed on the letterhead.

Sincerely,
Richard J. Spieler
Environmental Engineer
Solid Waste Management Section

Sincerely,
John A. Carrigan
Section Chief
Solid Waste Management Section

JAC/DCA/RJS/rjs

cc:

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ATTACHMENT 1

Fact Sheet

ATTACHMENT 2

Response to Comments